South Devon Area of Outstanding Natural Beauty

Nature Recovery Plan

V1. June 2023

Our Vision for Nature Recovery in the South Devon AONB by 2050 is:

> *The South Devon AONB is a unique species-rich Nature Recovery Network featuring a rich mosaic of ecosystems. It shapes and enhances the landscape's character, sustains livelihoods, creates wellbeing and inspires pride and active support within our local communities.*
>
> *Wildflower meadows, arable field margins, scrubland, wooded combes, flower-rich hedgerows, tidal and marine habitats, rivers, estuaries and wetlands - along with the species that depend on them - thrive in a nature-rich landscape that provides plentiful space and sanctuary for wildlife and ecosystem services such as food, water, clean air, carbon storage and opportunities for engaging with nature.*

Realising this ambitious vision is the object of this plan. It requires coordinated action by multiple partners across the AONB and, to enable progress to be tracked and momentum maintained, we aim to develop an Action Plan that will set out a series of measures and targets through the period up to 2050. We aim now to consult on the priorities contained in this Nature Recovery Plan and the develop our Action Plan with full input from partners.

Contents

1. Executive Summary

The South Devon Area of Outstanding Natural Beauty (AONB) is one of Britain's finest protected landscapes - loved for its significant and irreplaceable landscape features including rugged cliffs, sandy coves, peaceful countryside, picturesque villages, rolling hills, wooded valleys, colourful hedge-banks, and secretive estuaries. It is an ancient countryside with strong links to the sea and generations of human activity etched into the landscape. It has 97km of coastline, five river estuaries, and just over 28,000 hectares of agricultural land representing 83% of its total area.

The AONB is recognised as nationally and internationally important for an exceptionally wide range of species and habitats. It is strategically located in the South West, supporting many migratory species in their life cycles and many species that are adapting to climate change. It makes an important and essential contribution to the emerging national nature recovery network creating strategic links for wildlife through neighbouring landscapes and beyond.

However, in common with the rest of the UK, the South Devon AONB has suffered significant declines in its biodiversity. Many factors have contributed to this decline, with agricultural intensification, built development, increased visitor pressures, climate change and invasive species being the most damaging. One of the impacts of these pressures has been the fragmentation of a previous network of connected nature-rich sites, which are now all too often stranded as isolated islands of biodiversity surrounded by unsuitable habitat. Another significant trend has been the loss of quality of those remaining sites.

Professor John Lawton's influential 2010 report "Making Space for Nature" established a set of principles to tackle these challenges which have become widely adopted in England and further afield. This Plan follows Lawton Principles, namely to establish a coherent and resilient ecological network to:

- Improve the **quality** of current wildlife sites by better habitat management.
- Increase the **size** of current existing habitats and wildlife sites.
- Create **new** wildlife sites and identify where new habitats can be created.
- Enhance **connections** between, or join up, sites, either through physical corridors, or through 'stepping stones'.

A robust nature recovery network is not only good for wildlife, it also provides a range of "ecosystem services" such as clean water or food or a beautiful place to get away from it all and enjoy some peace surrounded by nature. These ecosystem services are critically important to the wellbeing and economy of people living in and around the South Devon AONB. A robust nature recovery network can help solve some of the issues faced by wider society, particularly concerning climate change and health and wellbeing.

We see the future area of the South Devon AONB as falling into one of three broad categories: nature-first; nature-rich; and nature-friendly.

Nature-first areas are our designated significant nature reserves and wildlife sites, where management should be focused on providing the best possible conditions for our special species and habitats. These areas need to be maintained in excellent condition and expanded and connected, wherever possible.

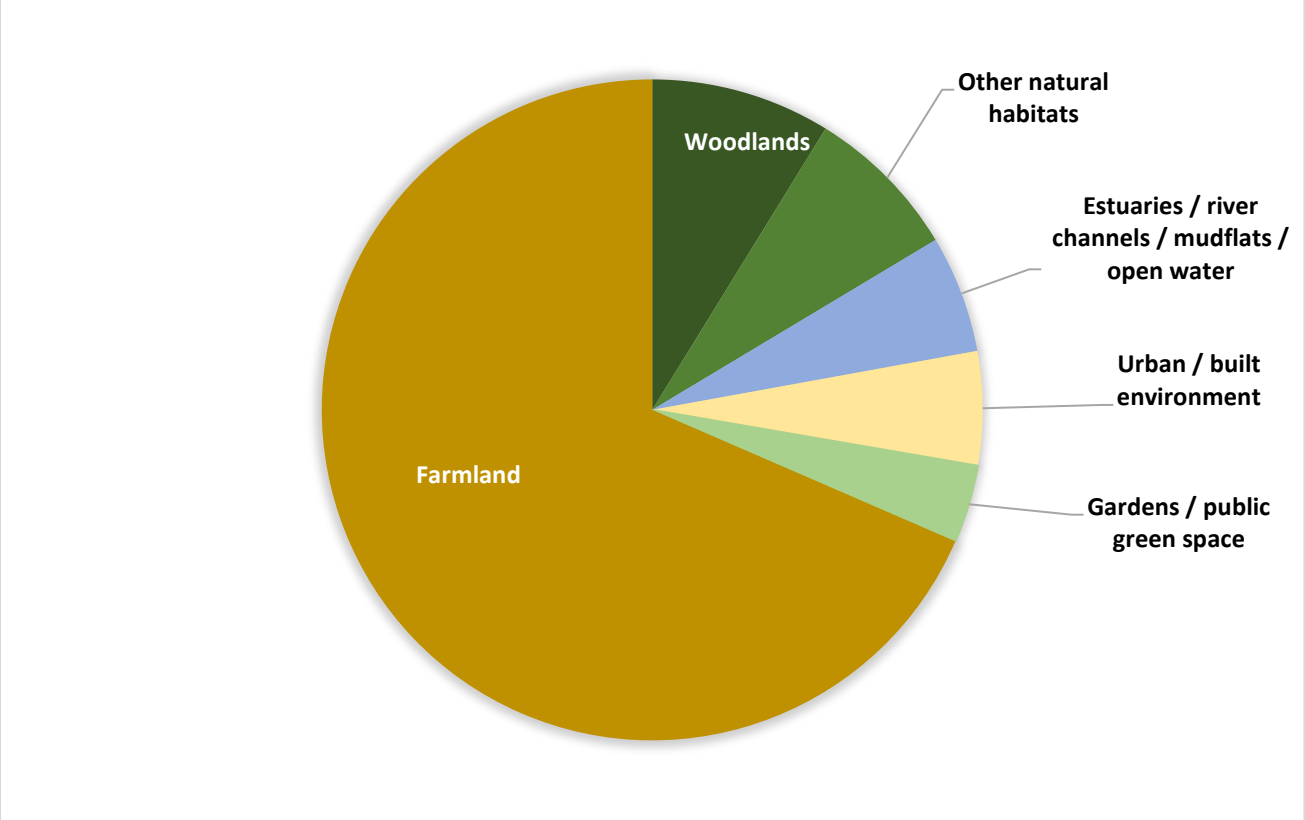
Nature-rich areas typically sit alongside and / or connect to our nature-first areas, creating many of the links that make up our wider ecological network. Here we expect to see thriving ecosystems supported by targeted management measures, sometimes working alongside management for other

services such as food or timber. These might typically be entered in a Countryside Stewardship Scheme recognising the specific management needs of the area's features of interest.

Nature-friendly areas are likely to occupy the remainder of the landscape and here more generic measures to support wildlife will be undertaken. These measures might typically be supported through the Sustainable Farming Incentive.

What does this mean for the South Devon AONB?

The area of the South Devon AONB is 33,987ha. The different land uses within the AONB are shown on the pie-chart below:



South Devon AONB Land Use 2023

Woodland	8.8%	National Forest Inventory data
Other natural habitats	7.6%	Includes non-agricultural Priority Habitats, other non-priority habitats
Estuaries / river channels / mudflats / open water	5.7%	Includes Slapton Ley
Urban / built environment	5.6%	Includes caravan parks, solar farms, airport
Gardens / public green space	3.8%	
Farmland	68.4%	From OS MasterMap

Across these land-uses there are 9,846ha of "**High Value Nature Areas"**, making up 29% of the AONB, which include designated nature conservation sites, other identified sites of nature conservation interest and priority habitats. This land is the focus for Lawton's first principle of **improving the quality of current sites**, and this is our first priority. Only 55% of our Sites of Special

Scientific interest are known to be in good condition, and this is a good indicator that the rest of our "nature-first" sites are struggling as well.

Other Nature Areas are sites that are considered to have some nature conservation value and these account for 2.5% of the AONB.

After taking out built up / developed areas, we are left with 20,634ha (61% of the AONB) that is not currently identified as having high value for nature.

- 68% (23,236ha) of the AONB is farmed and this is where the main opportunity lies for nature recovery on a landscape scale. Recovery for most of our special species and priority habitats needs to happen on farmed land and will be in the main delivered by farmers and landowners. Creating more nature-rich farmland habitats is therefore the over-riding priority for this plan.
- Nature-friendly farming should happen across the whole of the AONB, but it is most likely to be achievable on lower-grade agricultural land that produces less profit from food production. It is here that effort could be targeted to achieve "nature-rich" improvements. We have called this **Opportunity Zone 1**. This area is 7.5% of the AONB.
- Other important opportunities lie on higher-grade farmland, especially where links between existing or new nature-rich areas can be made, to build our ecological networks. We have identified a 200m buffer around our High Value Nature Areas and our lower grade farmland, where these links could best be made. We call this **Opportunity Zone 2** and it makes up 37% of the AONB.
- The remainder of the AONB (excluding urban areas) makes up **Opportunity Zone 3** covering 16% of the area. Here, on farmland, we hope to see farmers, land managers and stakeholders:
    - Creating large areas of extensively grazed grasslands in a dynamic mosaic with scrub and other habitats.
    - Managing wildflower grassland margins around arable fields.
    - Restoring and creating new hedgerows and Devon banks.
    - Integrating trees into agriculture through agro-forestry and allowing hedgerows to grow taller and thicker.
    - Establishing new copses to link, buffer and extend existing woodland
    - Establishing open grown in-field trees that can become the veteran trees of the future
    - Managing arable fields to encourage arable flowers such as poppies.
    - Overwintering stubble to provide a winter food source for farmland birds.
    - Providing stubbles and cover crops to conserve soils.
    - Using hardy local breeds of cattle– like Devon Reds – that can thrive on rough pastures.
- Other significant opportunities lie away from farmland, in our woodlands, wetlands, estuaries, coastal cliffs and marine environments. This plan identifies these opportunities and sets targets for their achievement.
- **By 2030** we aim for **36% of the AONB** to be classified as of a high value for nature (up from 29% in 2023).
- Our **targets for 2050** are to increase the overall area of specific priority habitats by **60%** above current levels. This will mean that an additional **5,200** ha of land will become nature-rich, incorporating:

- **2120 ha** of species rich grassland (made up of **370 ha** of distinct grassland habitats and **1750 ha** of maritime cliff and slope habitats expanding inland).
- **1235 ha** of new broadleaved woodland, including extensions to and links between existing woods.
- **320 ha** of wood pasture and parkland
- **340 ha** of new traditional orchards.
- **125 ha** of new wetlands
- **66 ha** of new saltmarsh
- **136 ha** of heathland
- **860 ha** of new mosaic habitats
- New hedgerows and Devon banks with better management of existing hedgerows

By 2050 we expect that a nature-rich network will exist across the whole of the South Devon AONB, and this is visualised in our new **Nature Recovery Opportunity Map**. This map is designed to help farmers and landowners make decisions about the management of their land. It is not a prescriptive tool nor does it create any new designations. It is intended to act as a guide for decision-making to help create coherent and resilient ecological networks.

This plan aims to generate an **Action Plan** for the future, helping to coordinate the work of multiple partners and agencies to deliver our shared ambition. Delivering the Nature Recovery Network for the South Devon AONB will involve everyone with an interest in the future of South Devon including those who manage the land, national agencies, local authorities, local communities, businesses, interest groups, the voluntary sector and people who visit the AONB.

The overall target is for the nature recovery network described in this plan to be fully in place by 2050. Intermediate targets have been set at 10-yearly intervals as a roadmap towards the overall target. Achieving these targets will depend on the work of many partners and individual landowners. Many existing and emerging strategies also relate closely and will help deliver this work, including:

- The Devon Local Nature Recovery Strategy
- Environmental Land Management Schemes in Devon
- Biodiversity Net Gain targeting
- Green Finance mechanisms
- Devon Tree and Woodland Strategy
- Devon Carbon Plan
- A South Devon focussed Landscape Recovery Scheme
- Life on the Edge project

2. Background and Context

2.1 Why is this plan needed?

This plan reflects a new focus on nature recovery in the South Devon AONB. This is part of a wider movement with all AONBs undertaking the production of Nature Recovery Plans as a shared commitment under the Colchester Declaration and the government's 30x30 commitment. This declaration was in turn a response to the finding that AONBs need to be doing more for nature within the Landscapes Review undertaken by Julian Glover in 2019.

30 by 30 is a global ambition adopted by the Convention on Biological Diversity in Montreal 2022 (specifically, Target 3 of the Kunming-Montreal Global Biodiversity Framework) and has been driving

environmental policy in the UK since 2020. The aim is to "*Ensure and enable that by 2030 at least 30 per cent of terrestrial, inland water, and of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem functions and services, are effectively conserved and managed*"

This Nature Recovery Plan identifies the current trends that have affected nature in recent decades and sets out a series of key questions that are at the heart of this Plan:

- What habitats/wildlife should we prioritise?
- Where should we target our resources?
- How much land is needed to create resilient and functioning ecosystems for nature?
- What will be the impact on the area of specific habitats?
- What could Nature Areas look like in 2030 and 2050?

It is proposed that this plan will be adopted as guidance by the South Devon AONB Partnership Committee and form part of a suite of documentation that is supported by the statutory Management Plan for the South Devon AONB. While this Nature Recovery Plan focuses on nature recovery the Management Plan takes a policy-led more holistic look at the social, economic and environmental factors operating within the South Devon AONB landscape.

Statutory Local Nature Recovery Strategies (LNRS) are being developed over coming years and, whilst we do not yet know all the details, they will be important in guiding nature recovery. LNRS development is taking place on a Local Nature Partnership/unitary or county local authority boundary basis. This Nature Recovery Plan will both help inform the application and development of the Devon LNRS, as well as responding to the Devon LNRS as it emerges.

The plan is also a response to the growing ecological and climate crises, with species and habitat loss occurring on an alarming scale here and abroad. Reversing these trends is a huge task and requires concerted, planned effort by the whole of society. Land managers, funders, communities, businesses and individuals will all benefit from having access to a plan that can guide conservation effort towards 2050.

The plan follows the Lawton Principles which provide an underlying framework. Professor Lawton's report of 2010 had a great impact on British nature conservation and since then his approach has been widely adopted, summarised by the phrase "more, bigger, better and joined". His report stated that to establish a coherent and resilient ecological network in England we need to:

1. Improve the quality of current sites by better habitat management.
2. Increase the size of current wildlife sites.
3. Enhance connections between, or join up, sites, either through physical corridors, or through 'stepping stones'.
4. Create new sites.
- Reduce the pressures on wildlife by improving the wider environment, including through buffering wildlife sites.

2.2 Scope of the Plan

This plan focuses on nature recovery within the AONB but extends its approach beyond the boundary of the AONB because species and habitats do not respect human boundaries. Wherever possible we have shown how the principles applying within the AONB can be extended beyond our boundary.

The urban communities of Plymouth and Torbay and the extensive uplands of Dartmoor National Park have a strong influence on the AONB and are themselves influenced by it, not least through forming a major part of several river catchments. This plan connects with and aims to shape initiatives in these locations. To understand the AONB in full context, please refer to the statutory Management Plan and its Appendices.

Most significant change will be funded through the Landscape Recovery scheme, one of 3 new Environmental Land Management schemes. It will complement the Sustainable Farming Incentive, which will support action at farm level to make farming more sustainable, and Local Nature Recovery, which will support action at local level to make space for nature alongside food production.

This scheme is for landowners and managers who want to take a more radical and large-scale approach to producing environmental and climate goods on their land.

This scheme represents a new approach to supporting long-term, significant habitat restoration and land use change of the sort that will be essential to achieve our environmental ambitions. We know there is demand for these kinds of projects, both among those who will deliver them and among the general public who want to see our most precious and beautiful landscapes restored and rejuvenated.

2.3 How the Nature Recovery Plan was produced

This plan has been developed as a partnership project between the South Devon AONB Staff Unit and various groups and individuals representing organisations including local authorities, community organisations, landowners, the private sector and conservation organisations. It has been developed under the guidance of a working group drawn from the Partnership Committee and has been consulted on in order to provide a consensus view on the best things we can do to aid nature recovery in the South Devon AONB and beyond.

The plan was developed through a series of steps, as follows:

- Production of the South Devon State of the AONB report
- A "South Devon AONB State of Nature" report was commissioned by the AONB Staff Unit in 2021. This describes the current biodiversity and natural capital of the AONB using open source data and data from the Devon Biodiversity Records Centre (DBRC). The findings of this report are summarised below.
- One to one discussions were held with nature conservation organisations active in the AONB, to research current priorities and programmes.
- A nature recovery network opportunity mapping exercise was undertaken to identify potential areas that could connect or expand existing priority habitats in line with the Lawton principles.
- An online workshop was held in February 2022 with representatives of nature conservation organisations active in the South Devon AONB, to share the initial findings of the opportunity mapping and explore the principles and priorities for future action.
- Based on the outcomes of the workshop the opportunity map was further refined and this draft Nature Recovery Plan was written.

3. Principles and Purpose

3.1 Principles

This plan is based on a set of principles that have been developed by the National Association of AONBs, designed to provide a common foundation for all Nature Recovery Plans. These are:

- **Iterative** - an iterative plan towards 2050 with an action plan to 2030 and longer-term targets for 2040 and 2050, aligned with statutory AONB Management Plan review cycles.
- **Integrated** - with the Devon Local Nature Recovery Strategy and the National Nature Recovery Network
- **Nature first** – prioritising nature recovery but where possible achieving wider ecosystem services such as carbon capture, flood management, cleaner air and water, pollination, climate change resilience, enhanced landscape character, and improved connection between people and nature
- **Resilient** - designed around Lawton's principles of bigger, better and more joined up
- **Collaborative** - adopting a collaborative approach at the core of ways of working
- **Inclusive** – encouraging and supporting all land managers to along a spectrum of positions ranging from intensive to semi-wilderness.

3.2 Purpose

The National Association of AONBs have identified a series of key questions that Nature Recovery Plans should try to answer, which frame its purpose.

- What habitats/wildlife should we prioritise?
- Where should we target our resources?
- How much land is needed to create resilient and functioning ecosystems for nature?
- What will be the impact on the area of specific habitats?
- What shape, configuration and proximity should the habitat blocks be to one another?

These questions are answered in the following sections.

4. The State of Nature in the AONB

The South Devon AONB consists predominantly of a mixed agricultural, open, plateau landscape with an extensive network of hedgerows and ancient sunken lanes, marked by richly wooded valleys and coombes interspersed with hamlets, villages and small towns. Its southern edge is bounded by a wild rugged coastline, dissected by five estuaries – each with their own different and special character. More information is available at the following websites:

https://www.southdevonaonb.org.uk/state-of-nature/

South Devon - Natural England (nationalcharacterareas.co.uk)

Significant habitats in the South Devon AONB landscape include:

- Ancient woodlands of mixed species
- Oak and wet woodlands
- Mature species-rich Devon hedges
- Flower-rich meadows and pastures on acid, neutral and calcareous soils
- Maritime cliffs, slopes and caves

- Maritime grassland and heathland
- Cereal field margins
- Shingle and sand dunes
- Rivers and riverbanks
- Salt marsh and tidal reedbeds
- Freshwater lagoons with marsh and reed beds
- Mud flats and submerged sediment flats
- Sheltered estuarine waters
- Rocky foreshore – sheltered and exposed
- Coastal waters and reefs
- Seagrass meadows

These priority habitats, together with designated and non-designated nature conservation sites, account for 29% of the terrestrial area of the AONB and are described in this report as our "High Value Nature Areas". Sites of Special Scientific Interest cover 5.8% of the AONB; however, only 55.5% of the Sites of Special Scientific Interest are in favourable condition, and the condition of priority habitats and non-statutory sites is currently unclear. The limited data available indicates that the condition of these habitats is not generally favourable. It has been said that the South Devon AONB is "feature-rich, condition-poor".

The range of habitats, and their complex associations, together with the southerly location of the AONB, also supports rare species assemblages and the South Devon AONB includes parts of internationally recognised Important Plant Areas and Important Invertebrate Areas. Appendix The South Devon Coast is recognised as hosting the most significant collection of Devon Special Species in the county, and this is a significant priority for nature recovery. The Life on the Edge project is the initial response to this, with the opportunity for further intensive work along the coast through, for example, a Landscape Recovery Scheme.

The natural capital of South Devon AONB is similarly rich. Marine and inter-tidal habitats are important for fisheries, and, together with woodland and other semi-natural habitats, can also comprise our most significant carbon sinks and long-term stores.

There are nine Geological Conservation Review Sites and 27 County Geological Sites within and close to the AONB boundary. The AONB within Torbay forms a significant part of the English Riviera Global Geopark. https://www.devon.gov.uk/geology/devons-rocks-a-geological-guide/.

4.1.Farmland

South Devon's landscape is primarily a farmed landscape and farmland accounts for 68% of land use. Many of the area's most valued habitats are maintained by farming activity including species-rich hedgerows, flower-rich meadows and pasture and cereal field margins. Changes in farming practices have seen field sizes increase, with the consequent loss of boundary features like hedges and stone walls, the reduction of grazing on marginal land, allowing scrub to dominate, and the intensification of farming on the better land, resulting in the loss of unimproved grasslands.

4.2 Woodland, wood pasture and hedgerows

9% of the AONB is covered by woodland, which equates to 2983 Ha. This is below the average for England (10%) and well below that for the other AONB's in England (15%). Of this woodland 25% is classified as ancient semi-natural woodland or plantation on ancient woodland sites.

75% of the wooded areas have been classified as broadleaved woodland and in 2017 42% of these were actively managed. Areas are classified as under active management by the Forestry Commission (FC) if they operate grants schemes and initiatives, felling licenses or are managed by the FC. From 2013 to 2017 the percentage of woodland under management changed from 34% to 42%, an 8% increase.

Hedges are one of the most important components of the South Devon AONB's landscape and ecology, providing corridors for wildlife to move between larger blocks of habitat, whilst forming a substantial habitat in their own right. More data is needed on the extent and condition of the AONB's hedgerows. One clear area of concern is the low extent of hedgerow and in-field trees across the inland plateau.

4.3 Maritime grasslands, cliffs and slopes

The South Devon coast has been designated an Important Invertebrate Area and also forms part of an Important Plant Area, on account of the rare and threatened species to be found here. These specialist species have become confined to a narrow coastal strip between the sea and the farmed plateau. They have become extremely vulnerable, and the Six-banded nomad bee, Nomada *sexfasciata considered to be the rarest bee in Britain* has not been recorded for at least 4 years despite the Life on the Edge 2022 targeted survey work.

4.4 Intertidal and marine habitats and communities

The South Devon AONB estuaries and coast support a rich diversity of habitats and communities dictated by the habitat's local conditions. These range from the lower energy upper intertidal communities of saltmarsh, seagrass meadows, mud flats and rocky shore found within the estuaries to the high energy sandy, rocky and shingle shores of the open coast and tidal current swept rocky reefs and mixed sediment beds below. Most of the South Devon AONB estuaries and its coast are designated as Marine Protected Areas, Sites of Special Scientific Interest (SSSI), Special Areas of Conservation (SAC) and Marine Conservation Zones (MCZ)

All of the South Devon's estuaries are ria-types (drowned river valleys that formed estuaries with their classic long deep channel and steep sides). The Salcombe-Kingsbridge Estuary is a text-book example of a dendritic ria but unusual in the trickles of streams that now flow where once its forming rivers once flowed. Today, the Salcombe Harbour – Kingsbridge Estuary is more of a saline dominated, sheltered tidal marine inlet.

The estuaries and coast support several rich, rare, unusual and special marine communities and species, and many are important for their blue carbon vaulting as well as their exceptional biodiversity. Marine community examples include Salcombe's seagrass meadows, Berry Head's Sea caves and inshore East Rutts rocky reefs. Marine species examples include both species of British seahorses and seagrasses, unusually shallow water fan mussels and several exotic marine worms.

The estuaries are highly productive areas which, together with other intertidal habitats, support large numbers of birds and fish including feeding and resting areas for migrant and wintering waterfowl and nursery areas for many fish.

The estuarine habitats and communities have generally survived but may be a poor representation of their historic extent, with a history of commercial and recreational pressures, water quality and invasive non-native species affecting their extent and health.

4.5 Rivers and wetlands

The South Devon AONB is strongly characterised by the tidal mouths of the rivers that drain through the area, the principal ones being the Avon, Dart, Erme and Yealm.

These rivers and their tributaries are generally in "Good" or "Moderate" ecological condition, but this is by no means a clean bill of health. "Moderate" is not an acceptable status and indicates that multiple challenges exist to a river's natural function. The main reasons for failure identified by the Environment Agency are agriculture and rural land management, waste water treatment and physical modifications made by the water industry.

5. Forces for change

The following section summarises the trends that are affecting the nature of the AONB, in either positive or negative ways.

Over time it will be necessary to undertake analysis of climate change resilience, habitat suitability/connectivity and other factors.
Exploring scenarios based on latest available climate predictions will help to understand how species and habitats will be affected in the short, medium and long-term. This will help to refine priorities for species recovery and reintroduction, and to identify potential for natural colonisation by new species.

5.1 Climate change

- Warmer and wetter winters, hotter and drier summers and extreme weather events, including higher intensity rainstorms and flash floods, will occur more frequently at all times of year.
- Rising sea levels and extreme storm events will increase coastal erosion and squeeze coastal and estuarine habitats against our manmade and naturally steep sloped shores.
- Wildfires will become more frequent and damaging.
- Flooding, soil erosion and land runoff will become more extensive.
- Low summer river levels and high water temperatures will stress river wildlife.
- The timing of natural events is shifting, causing disconnects between natural cycles like invertebrate breeding and food-plant availability.
- As the climate envelope moves to higher latitudes and altitudes, some species will be forced to move with it, which could see the arrival of more continental species in South Devon and the departure of others.
- Land managers may be forced to make changes that impact on habitats, for example growing different more drought-resilient crops.

5.2 Social change

- The population of the AONB continues to grow, and demand for housing with it. This puts pressure on land use and can also impact on water quality and flooding.
- Recreation pressures are growing, as adjoining urban populations grow and tourism increases. This has the potential to increase disturbance of sensitive wildlife and livestock and trigger conflicts with local communities and farmers.
- Peoples reducing level of awareness and understanding of nature. While there is interest in global issues, there is relatively little understanding or knowledge of local ecosystems, species and habitats. This can undermine both the messaging of how desperate a situation we are in and also threaten actions and support for nature.

+ Conversely, many people are becoming more aware of environmental issues and this is triggering positive change, such as volunteering or reducing consumption of damaging products.
+ Income from tourism can help maintain good natural habitats.
+ Funders are supportive of work to address declines in biodiversity and programmes like Life on the Edge.

5.3 Agricultural change

+ Developing post-Brexit Agri-environment schemes targeting "public money for public goods", will have significant impacts on the delivery of the plan.
– However, some farmers may not take up this support and choose instead to intensify management to remain profitable. Without strong regulation and enforcement this could result in environmental damage, e.g., by diffuse and point source water pollution, atmospheric pollution, further habitat losses, soil compaction and erosion and increasing use of biocides.
+ Another response to the changes in agricultural funding may be for farmers to retire or sell their farms. This tends to result in a reduction in the numbers of medium-sized small farms suited to mixed farming systems and the expansion of more intensive systems.
+ Diversification enterprises are predicted to provide a greater percentage of farm business income. This diversification could have significant environmental effects, eg viniculture, campsites, novel crops.
– Without ongoing support extensive grazing systems that maintain diverse grasslands and scrubby ecosystems are likely to be reduced
+ Programmes like Life on the Edge and Cirl Country offer targeted support for extensive mixed farming.
+ There is growing demand amongst consumers for higher quality conservation-grade produce, which could favour extensive agricultural systems.
+ Regenerative farming practices are increasing and provide a more sustainable approach to food production

5.4 Habitat fragmentation

– As farming and development pressures have intensified, nature-rich areas have been squeezed to the margins and into the smaller, fragmented and isolated oases of protected sites. This fragmentation is ongoing and is one of the most significant barriers to nature recovery.

5.5 Management of Core Nature Areas

– The condition of our primary designated sites and priority habitats is declining, primarily because of reducing levels of investment in their management combined with increasing pressures from climate change, population growth and agriculture.

5.6 Hedgerows, Trees and Woodlands

+ There is growing demand for planting trees as a measure to combat climate change and generate the multiple benefits that woodlands can offer including acting as carbon sinks, removing CO2 from the atmosphere, natural flood management, improving water quality, increasing biodiversity, protecting livestock and crops, recreational space and sustainable building materials.

+ This is a powerful tool for delivery of many of this plan's core components including new hedgerows, hedgerow trees and new woodlands.
+ Well planned and managed woodland creation may provide new, effective and vital green wildlife corridors. Ensuring all new woodland is compliant with the UK Forest Standard gives assurance that the Right Tree is in the Right Place.
– However, whilst well-planned tree-planting is to be embraced, landowners tend to select their less-productive land for this purpose where a nature-rich habitat may be lost. This land often has high nature potential and there is a risk that the creation of other nature-rich ecosystems such as extensive grasslands is made more difficult.

5.7 Invasive non-native species

– Invasive non-native species (INNS), pests and diseases are occurring more frequently.
– Particularly within the marine environment, prevention may be the only option rather than cure – freshwater INNS must often be tackled upstream first to prevent their downstream return.

6. Priorities for nature

We identified above a series of questions that this Nature Recovery Plan seeks to answer, in order to realise our Vision. These are:

- Which ecosystems and natural processes need our support the most?
- Where should we target our resources?
- What targets do we set ourselves around nature recovery to be ambitious but realistic?
- What will be the impact on the area of specific habitats?
- What could the South Devon AONB look like in 2050?

This and the following section (Opportunity Mapping) tackle these questions.

6.1 What habitats/wildlife should we prioritise?

68% of the AONB is farmed and this is where the main opportunity lies for nature recovery on a landscape scale. Recovery for most of our special species and priority habitats needs to happen on farmed land and will be in the main delivered by farmers. Some examples to note here are species-rich unimproved grasslands, coastal and floodplain grazing marsh, rush pasture, cirl buntings, greater horseshoe bats, barn owls and small pearl-bordered fritillaries, all of which require specific management that is provided by a range of farming techniques.

Creating more nature-rich habitats on farmland is therefore the over-riding priority for this plan. This provides the greatest opportunity to enhance the biodiversity value of the SDAONB and realise our vision towards 2050.

Aquatic and marine ecosystems will benefit from improved water quality arising from more nature-friendly management across the landscape. However, we also need focused action on non-farmland ecosystems (see section 9 below).

The key habitats and champion species of the AONB are described in section 5 above. These provide a broad-brush framework for our work in building resilient ecosystems. Actions that deliver functioning habitats and ecosystems that sustainably support these species are most likely to deliver our Vision and provide a nature-rich landscape across the AONB.

6.2 Where should we target our resources?

The approaches to creating a resilient ecological network set out in the Lawton Report are:

1. Improve the quality of existing Nature Areas by better habitat management.
2. Increase the size of existing Nature Areas.
3. Create new Nature Areas.
4. Enhance connections between, or join up Nature Areas, either through physical corridors, or through 'stepping stones'.
5. Reduce the pressures on wildlife by improving the wider environment, including through buffering Nature Areas.

The first of these approaches targets resources at existing priority habitat areas including designated sites and this was seen by the Lawton Report as being the first priority. Our target is that by 2030 all Core Nature Areas and waterbodies will be in favourable or recovering condition[1] and by 2050 these will all have achieved Favourable or Good condition.

The remaining approaches all require land outside of the Nature Areas to be managed better for nature. This involves a targeted approach that expands, buffers or links existing Nature Areas and creates new Nature Areas, alongside a non-targeted approach that seeks improvements across the wider landscape.

Firstly, we wish to encourage change at a transformational level through **"nature-first management"** which would see the expansion of existing Nature Areas and the creation of large new Nature Areas. For example, dedicating farmland to nature as the first priority, as has been achieved by the Knepp Estate in West Sussex and could be replicated in the South Devon AONB at scale. This is already underway on the Sharpham Estate overlooking the River Dart.

A second approach, which could be targeted on lower-grade farmland where the impacts on food production are likely to be lower, is **"nature-rich farming"** where semi-natural habitats are developed and maintained through low-input farming, using regenerative systems and agro-ecological approaches.

Thirdly, **"nature-friendly farming"** could be adopted across all farmed land in the AONB, using mixed farming systems that allow plentiful space for nature and maintain diverse ecosystems whilst continuing to provide high quality food.

The following techniques are some of those that have proven value in generating nature-rich habitats within a productive farmland setting:

- Creating large areas of extensively grazed grasslands including some scrub.
- Managing wildflower grassland margins around arable fields.
- Restoring and creating new Devon banks and hedgerows.
- Integrating trees into agriculture through agro-forestry and allowing hedgerows to grow taller and thicker.
- Creating riparian woodlands to actively buffer the watercourses from agricultural pollution
- Increasing the management of existing woodland to deliver a sustainable resource and improve outcomes for biodiversity
- Managing arable fields to encourage arable flowers such as poppies.

[1] See NE evaluation link

- Overwintering stubble to provide a winter food source for farmland birds.
- Providing stubbles and cover crops to conserve soils.
- Using hardy local breeds of cattle– like Devon Reds – that can thrive on rough pastures.

In the following Section we explore how these approaches can provide a roadmap that farmers, landowners and the conservation sector can use to target changes to create a resilient ecological network across the AONB.

6.3 How much land is needed to create resilient and functioning ecosystems for nature?

The area of the South Devon AONB as defined by its legal boundary is 33,987ha. Of this, 1,888ha (5.6%) is urban or other built development.

There is a total of 9,846ha of High Value Nature Areas (consisting of priority habitats, designated nature sites and other identified sites of nature conservation interest), representing 29% of the total area of the AONB. This land is the focus for Lawton's first principle of improving the quality of current sites.

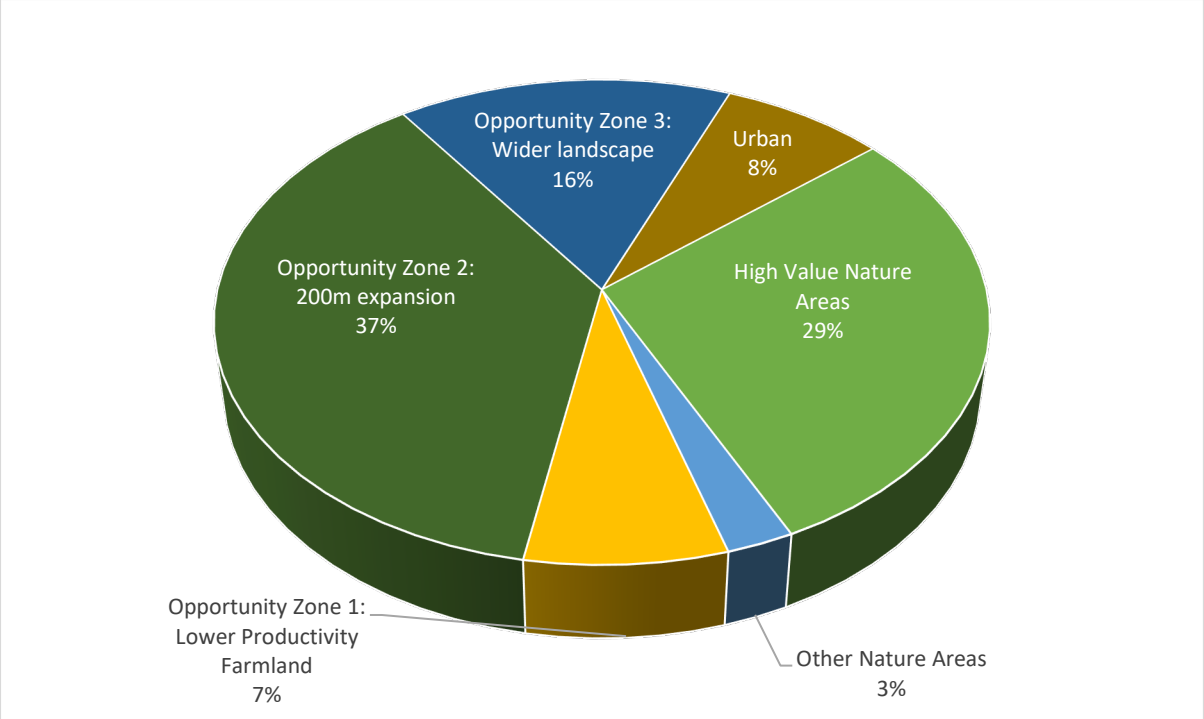
Other Nature Areas is a set of locations that are deemed to have some existing nature conservation value and accounts for 2.5% of the AONB.

After taking out areas of buildings / development, 20,634ha (61%) of the AONB remains that is not currently identified as having high value for nature.

Opportunity Zone 1 consists of the poorest agricultural value land according to the national agricultural land classifications. Approximately 10% of the AONB's farmland is of grade 4 and 5 (i.e. "poor or very poor quality, with severe limitations"), 80% is of Grade 3 ("good to moderate quality"), and 10% is Grade 2 ("very good quality"). Our analysis in Section 8 below identifies 2,538ha of lower-grade agricultural land (Grade 4 and 5 along with some marginal Grade 3) outside of the High Value Nature Areas. Here landowners and managers may be able most easily to create more nature-rich areas.

On higher-grade land adjacent to existing Nature Areas and Opportunity Zone 1, we have allowed a 200m expansion zone which is **Opportunity Zone 2**. This is a substantial area of 12,711ha. In both zones we hope to see the adoption of nature-first and nature-rich farming and land management techniques wherever possible.

Across the remaining area of the AONB, which we describe as **Opportunity Zone 3**, we hope that nature-friendly techniques will be widely adopted.



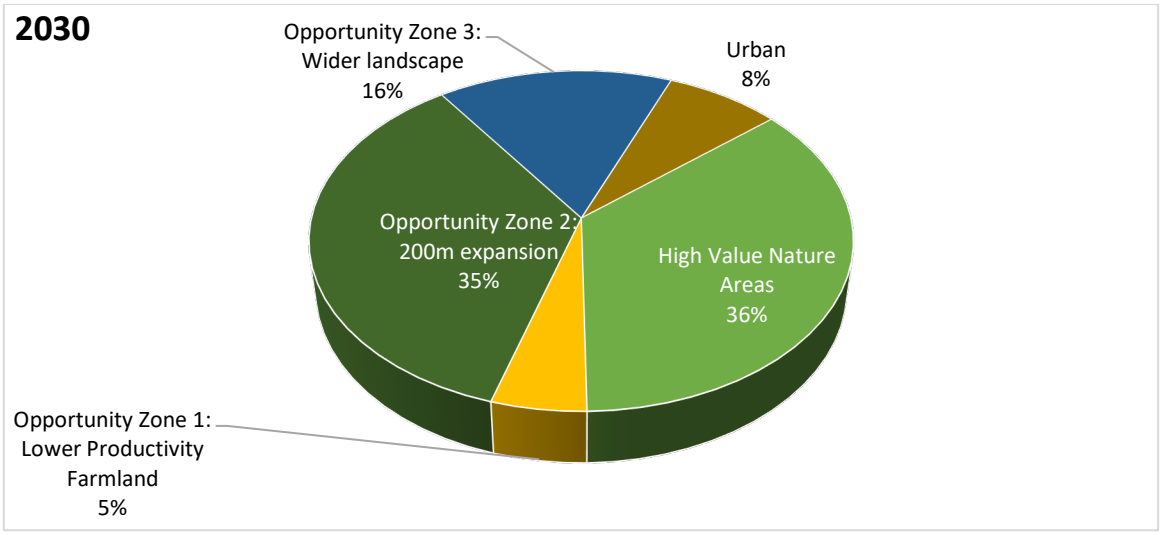
South Devon AONB Nature Recovery Opportunity Zones

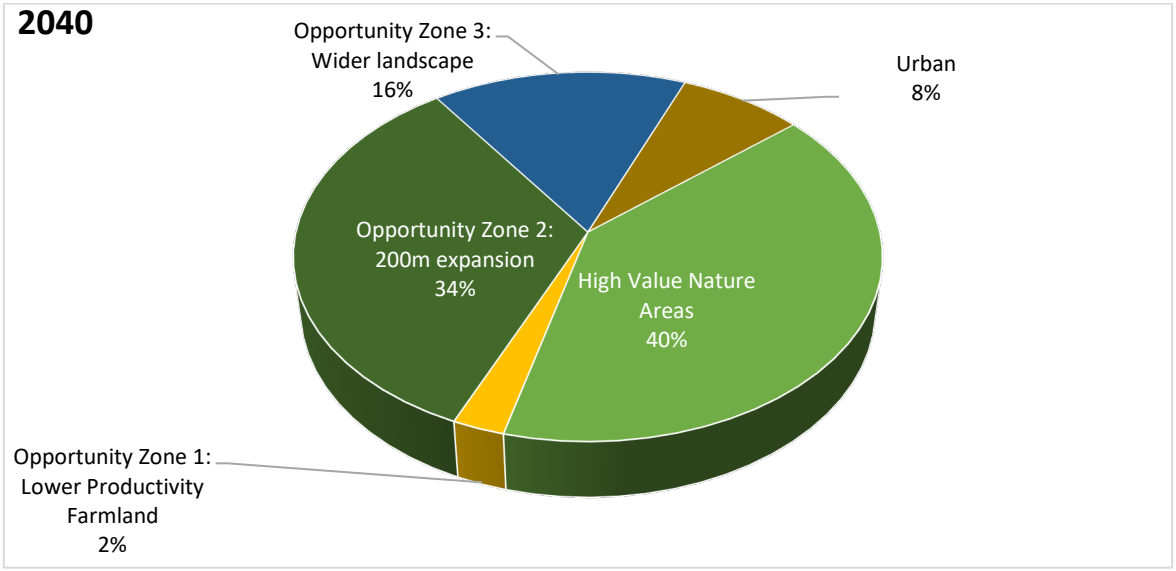
In sum, our ambitious targets for 2050 are:

- Approximately 2,500ha of less productive land (ie Opportunity Zone 1) will be dedicated to nature-first or nature-rich land management.
- Approximately 2,500ha of higher-grade land in Opportunity Zone 2 will dedicated to nature-first or nature-rich land management
- As a result, an additional 5,000ha of farmed land representing almost 15% of the total area of the AONB will adopt new nature-friendly farming practices
- This means that the total Nature Area of the AONB will increase in size by 50% to make up 46% of the area of the AONB.

We anticipate that a fairly consistent process of change will take place as landowners and managers adopt new more nature-friendly approaches. The table below sets out a potential progression. Note that changes in land management result over time in more and more land being classed as being of High Nature Value.

All in hectares	**Current**	**2030**	**2040**	**2050**
High Value Nature Areas	9,846	12,169	13,642	15,776
Other Nature Areas	850			
Opportunity Zone 1: Lower Productivity Farmland	2,538	1,700	863	
Opportunity Zone 2: 200m expansion	12,711	12,075	11,440	10,169
Opportunity Zone 3: Wider landscape	5,385	5,385	5,385	5,385
Urban	2,643	2,643	2,643	2,643


2030
Opportunity Zone 3: Wider landscape 16%
Urban 8%
Opportunity Zone 2: 200m expansion 35%
High Value Nature Areas 36%
Opportunity Zone 1: Lower Productivity Farmland 5%


2040
Opportunity Zone 3: Wider landscape 16%
Urban 8%
Opportunity Zone 2: 200m expansion 34%
High Value Nature Areas 40%
Opportunity Zone 1: Lower Productivity Farmland 2%


2050
Opportunity Zone 3: Wider landscape 16%
Urban 8%
Opportunity Zone 2: 200m expansion 30%
High Value Nature Areas 46%

An interesting feature of the approach using agricultural land classification as a means of targeting conservation effort is that most lower grade land lies along watercourses. This indicates a topography for the nature recovery network of interconnected and generally sheltered valleys where a wide range of habitats can be created including wetland, woodland and grassland communities. With higher-grade land tending to lie on the plateaux between the valleys, nature-rich corridors and stepping-stones can be targeted across this more productive land to connect river valleys and strengthen the resilience and effectiveness of the network.

6.4 Resilient and functioning marine environments for nature?

Marine nature recovery is needed to reverse past declines in wildlife and habitats and bring our seas back to life, so that they are healthy and thriving now and into the future for people, climate and nature. To rebuild the marine life-support systems that deliver the many benefits that society receives from a healthy ocean we need urgent action. This includes:

• A growing and resilient Marine Protected Area (MPA) network designated and managed for nature conservation, including some Highly Protected Marine Areas

• Habitat restoration and creation within and outside the MPA network to help restore ecological processes and connect marine wildlife populations

• Building resilience to climate change, including acting to protect, restore and expand vital 'blue carbon' assets and the ecosystem services that they provide

• Enabling people to enjoy, understand and connect with nature at sea, benefitting health and wellbeing

A network of Marine Protected Areas has already been established within and beyond the boundary of the AONB, with the aim of making a significant contribution to the resilience and recovery of the marine ecosystem. Current management of the MPA network focuses on the maintenance or recovery of specific features of conservation interest contained within MPAs.

In this sense, MPAs, designed to act as an ecologically coherent network of sites, enable conservation within the MPA boundary but do not address the management of the wider seas between MPAs. This makes the existing MPA network akin to the core areas plus 'stepping stones' envisaged for the terrestrial NRN.

Effective management in the wider seas, with measures outside of protected sites, is therefore essential to complement the benefits of the MPA network. This management is at present delivered through combined efforts across marine planning, licensing, fisheries management and the overall progress towards delivering Good Environmental Status (GES) for UK seas through the UK Marine Strategy.

This Plan seeks to keep the collective pressure of human activities within levels compatible with the achievement of GES. The UK Marine Strategy outlines 11 qualitative descriptors defined to help assess progress towards achieving GES: biodiversity, non-indigenous species, commercial fish, food webs, eutrophication, sea-floor integrity, hydrographical conditions, contaminants, contaminants in seafood, marine litter and underwater noise.

It should be noted that neither the UK MPA network nor the UK Marine Strategy were originally designed to deliver 'nature recovery' , and therefore, although in combination they should deliver significant benefits towards this goal, additional measures and aims may be necessary.

In order to deliver nature recovery for the marine environment, we must consider what further actions could be taken in addition to the establishment and proper protection of MPAs; to safeguard and restore the marine environment, increase economic and social benefits and improve public services. Wider measures, designed to deliver recovery and restoration of the marine ecosystem, must also include explicit measures to help restore carbon-rich habitats to help limit the impacts of climate change.

6.5 What will be the impact on the area of specific habitats?

Current data on priority habitats in the AONB[2] provides a baseline for the extent of key habitats identified in this plan. These are set out in the table below. We have set targets for doubling the extent of most of these habitats, with some exceptions (see notes in Appendix 1 for the rationale).

Priority habitat type	Current area ha	Increase of ha.	Increased total area in ha.	% increase
Ancient woodland	614	N/A	0	0
All woodlands except ancient	2,471	1,236	3,707	200
Coastal saltmarsh	133	66	199	200
Coastal vegetated shingle	14	N/A	0	0
Lowland calcareous grassland	25	25	50	200
Lowland dry acid grassland	90	90	181	200
Lowland fens	11	11	22	200
Lowland heathland	34	137	171	500
Lowland meadows	59	236	295	500
Maritime cliff & slope	1,751	1,751	3,503	200
Other priority habitats (mosaic so not classified)	1,720	860	2,580	200
Purple moor grass & rush pastures	9	17	26	300
Reedbeds	56	113	169	300
Rivers	125		0	0
Traditional orchard	171	342	512	300
Wood pasture and parkland	162	324	485	300
TOTALS	**7,445**	**5,207**	**11,899**	**160**

[2] Natural England Priority Habitat Inventory

Our targets for 2050 are to increase the overall area of specific priority habitats by **60%** above current levels. This will mean that an additional **5,200** ha of land will become nature-rich, incorporating:

- **2120 ha** of species rich grassland (made up of **370 ha** of distinct grassland habitats and **1750 ha** of maritime cliff and slope habitats expanding inland).
- **1235 ha** of new broadleaved woodland, including extensions to and links between existing woods.
- **320 ha** of wood pasture and parkland
- **340 ha** of new traditional orchards.
- **125 ha** of new wetlands
- **66 ha** of new saltmarsh
- **136 ha** of heathland
- **860 ha** of new mosaic habitats

NB, hedgerows are a hugely important part of the South Devon landscape and improving and extending this network is a major priority for this plan. We do not currently have sufficient data on the condition and extent of hedgerows in the AONB but this will be an essential next stage for the NRP.

6.6 What could the network of Nature Areas look like in 2050?

Our Opportunity Mapping has been based on a realistic approach to use lower grade agricultural land to connect and expand existing Nature Areas, supplemented by targeted work to extend the network across more productive farmland.

We have used a buffering approach around the lower grade land to visualise how connections could be made across higher-grade land to create bridges between Nature Areas or isolated elements in the network.

In all cases the goal has been to secure physical connection between elements or, at the very least, to minimise any island effects.

Please note: our approach is a model based on agricultural land classifications. It needs to be used as a guideline and adapted to each individual farm or land holding. The model does not proscribe the actual interventions recommended on any parcel of land, simply the potential for change. The **Devon Habitat Suitability Map** (HSM), which is available on the Devon Environment Viewer, is a separate tool that can be used to identify what types of habitats are best to create in any location. For example, different soils will naturally support different species of flora and, when selecting species to plant or seed, the HSM can guide decisions.

7. Opportunity mapping

We have developed a "**Nature Recovery Opportunity Map**" (NROM) for the AONB. As described above, this targeted the less productive agricultural land as having the greatest opportunities and economic feasibility for increasing its nature value.

7.1 Less Productive Farmland

Agricultural Land Classification is not mapped field by field, and land has been mapped to their most prevalent grade, so that we could build up our opportunity map on a field by field basis which could

be more useful for farmers and landowners when planning changes to their management. On this basis we mapped all of the **Grade 4 and 5** agricultural land, to see how this might help develop our understanding of the potential for more coherent and resilient ecological networks. This land covers 2,476ha.

We also mapped **steep Grade 3** land, on the basis that this land is likely to be difficult to farm and less productive as a result. We selected a slope of 20 degrees or more and any field that has such a slope across at least 25% of its area was added to the map. This land covers 62ha.

The resulting Less Productive Farmland (Grade 4 and 5, plus steeply sloping Grade 3) is described as **Nature Recovery Opportunity Zone 1**. The total area of this zone (outside of the High Value Nature Areas) is 2,538ha, 7.5% of the total area of the AONB.

Our rationale is that these areas of land are likely to be the least productive and therefore the land where a farmer or landowner could most readily make changes to make more space for nature, whilst having the least impact on the farm's overall productivity. Obviously, each farm is unique and assessing these opportunities on the ground would have to be undertaken on a farm-by-farm basis, but the approach is useful for generating a strategic overview of opportunities.

7.2 More Productive Farmland

Substantial areas of farmland remain that separate the emerging networks of Nature Areas and Least Productive Farmland. These are, in the main, Grade 3 and are therefore likely to be making an important contribution to farm incomes. However, the Nature Recovery Plan aims to encourage and stimulate a nature-rich landscape across the whole of the AONB and wherever there are opportunities to improve farmland (or any other land) for nature.

We know that many farmers and landowners want to explore changes to farming practices that could deliver nature recovery on their Grade 3 or higher land. These changes could include targeted work on specific corridors that would help to build coherent and resilient ecological networks. The NRP should provide a framework for these decisions, by showing how these changes fit with the creation of ecological networks and where links could best be made between otherwise disconnected nature-rich sites.

We have therefore mapped a 200m buffer around all existing Nature Areas and Least Productive Farmland to show where work on Grade 3 land could have the greatest impact, either by expanding existing Nature Areas or by connecting otherwise isolated sites of potential. Where these buffer sites came close to each other, we mapped connections across the gaps. We have called these components "**Nature Recovery Opportunity Zone 2**".

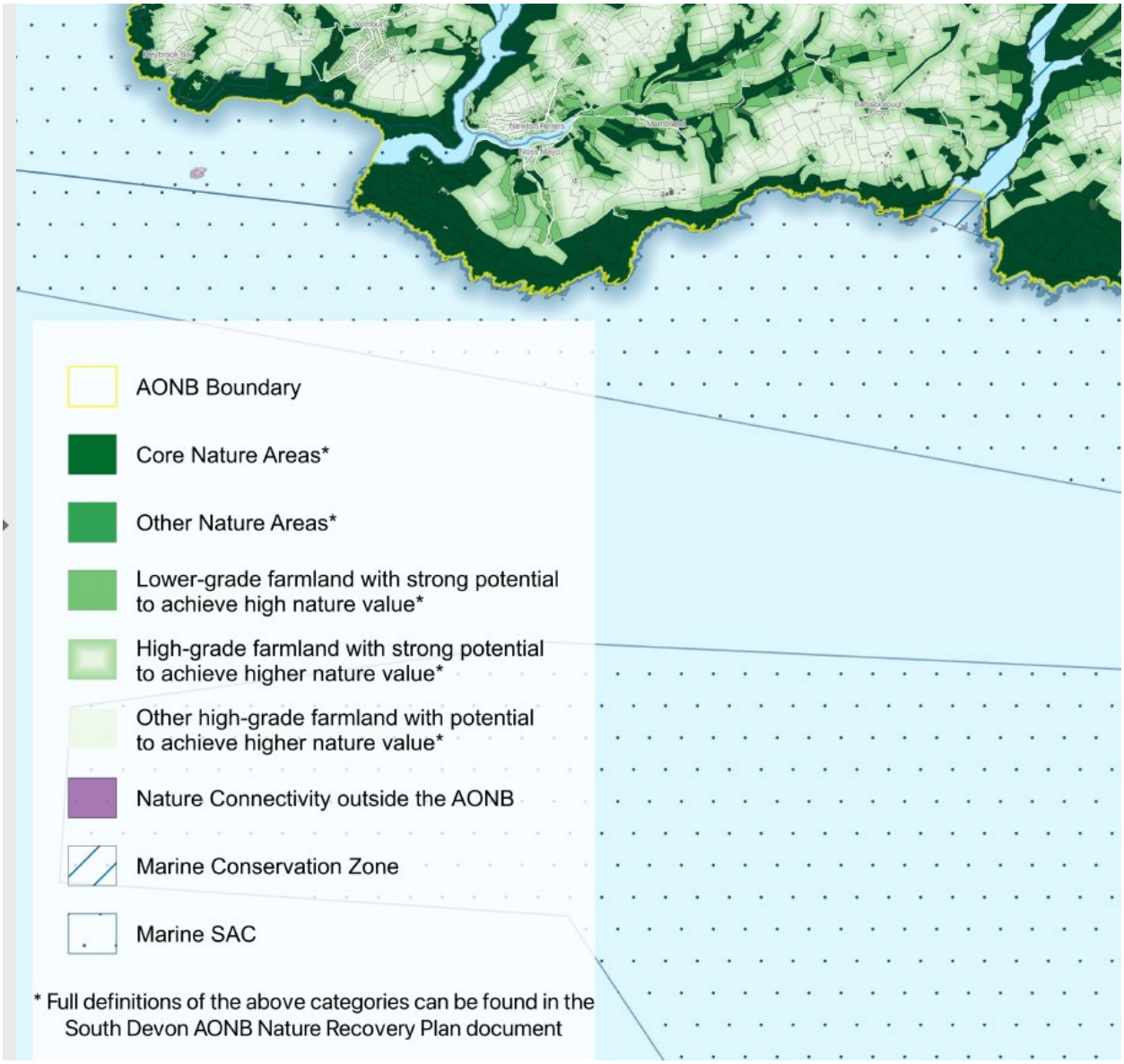
The remaining area beyond these Buffers and Bridges does still have great nature potential and this plan anticipates that farmers and land managers could focus changes on these areas to further connect and extend existing nature areas. This we call **Nature Recovery Opportunity Zone 3.**

7.3 The Nature Recovery Opportunity Map

This map is designed to help farmers, landowners and stakeholders make decisions about the management of their land. It is **not** a prescriptive tool nor does it create any new designations. It is intended to act as a guide for decision-making to help create coherent and resilient ecological networks and help nature recover across all of the AONB using a three tier approach of **'nature-first, nature-rich, nature-friendly'**.

The mapping work in still progress and there may be some mapping errors. If you see anything significant, please do let us know by emailing adam.davison@southdevonaonb.org.uk.

Please note that, although a parcel of land may not be mapped as a Core Nature Area / Nature Area, it still could be a Priority Habitat or support rare species, it just hasn't yet been recorded!



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Please double click this icon to view the full map of the SDAONB Nature Recovery Opportunity zones and zoom to view areas in detail.

8. Priority Actions

This section outlines the priority actions that have been identified to secure the recovery of key habitats and species in the South Devon AONB.

8.1 A resilient ecological network

- Improve the condition of our existing Nature Areas through better management.
- Build a strong and extensive ecological network that links existing Nature Areas, so that species can move freely between them. New and improved hedges, better=protected and enhanced rivers, and other new or restored features, can all be used to connect existing sites.
- Expand existing, and create new Nature Areas, to further strengthen the network.
- Develop the ecological resilience and connectivity of the South Devon coast B-Line as a major priority (developing from the foundations of the Life on the Edge project and capitalising on funding opportunities from ELM and Payments for Ecosystem Services).

8.2 Farmland

- Support farmers and landowners to introduce nature-first, nature-rich or nature-friendly areas, according to the opportunities available and following the principles below.
- Create large areas of extensively grazed grasslands including some scrub.
- Restore heathland habitats where the soils are suitable.
- Manage wildflower grassland margins around arable fields and manage arable fields to encourage arable flowers such as poppies.
- Restore and create new Devon banks and hedgerows.
- Integrate trees into agriculture through agro-forestry and allowing hedgerows to grow taller and thicker.
- Overwinter stubbles to provide a winter food source for farmland birds.
- Provide stubbles and cover crops to conserve soils.
- Use hardy local breeds of cattle– like Devon Reds – that can thrive on rough pastures.
- Support large-scale “re-wilding” where landowners and managers are willing to adopt this transformational approach and it is appropriate for the setting.
- Use Landscape Recovery-scale approaches to generate significant landscape-scale change.

8.3 Woodlands

- Improve the management of existing woodland to deliver a sustainable resource and improve outcomes for biodiversity.
- Create new riparian woodlands to actively buffer watercourses from agricultural pollution
- Create new woodlands in strategically important positions to enhance the landscape and following “right tree, right place” principles.
- Target the Plymouth and South Devon Community Forest on sites that deliver the best connectivity across the landscape whilst protecting existing priority habitats and opportunities to connect them (e.g., grassland, heathland).

8.4 Wetlands

- Create new wetlands such as ponds, scrapes and reedbeds.
- Create wetland buffers adjacent to watercourses.

8.5 Estuaries

- Protect seagrass beds from disturbance by anchors or other recreation pressures.

- Create or extend saltmarsh habitats.

8.6 Coastal and Marine

Marine habitat restoration for nature recovery whether of Marine Protected Areas or areas outside current protection, is often focused on removing or mitigating pressures to allow marine habitats and species populations to persist and recover.

The impact of humans on our seas and marine wildlife is so significant that protecting current levels of biodiversity and habitat and managing current impacts will not be enough to achieve recovery. The growing focus on active intervention to restore what has been lost in South Devon includes vegetated habitats such as seagrass and saltmarsh, but also native oyster beds.

These habitat types are relatively amenable to habitat restoration and provide significant measurable benefits in terms of increased carbon storage, and so will be key to delivery of marine nature recovery both within and outside of the MPA network. In summary, achieving nature recovery in the marine environment is both urgent and essential. The scale of the threats facing our oceans today is enormous and must be matched with the scale of our ambition to recover nature at sea without delay.

This will require a step-change in our approach to marine nature conservation. We need better protection and management of our MPA network, including some areas given the strictest levels of environmental protection, as well as wider seas management aimed at removal and mitigation pressures, coupled with active restoration of marine habitats that align with the ambitions set out by the government in the 25 Year Environment Plan. Above all, to deliver the benefits to people it will be vital to inspire and connect people and communities to the marine environment – increasing public enjoyment and understanding of our coasts and seas.

9. Towards an Action Plan

How can nature recovery be realised? The next stage in the development of a full Nature Recovery Action Plan is to consult partners on the targets developed in this document, explore how existing programmes may help achieve these and what new initiatives may be needed.

Some of the existing programmes and mechanisms operating in the South Devon AONB, and others that may come into effect soon, are listed below. Through the coming consultation period we look forward to exploring these in more detail, as well as including any initiatives that have been missed.

- *Sustainable Farming Incentive (SFI)* helping farmers manage land in a way that improves food production and is more environmentally sustainable. Farmers will be paid to provide public goods, such as: improved water quality, biodiversity, climate change mitigation and animal health and welfare.

- *Landscape Recovery* - a large-scale, long-term approach to producing environmental and climate goods funding ambitious landscape-scale projects through bespoke, long-term agreements delivering a wide variety of environmental and social outcome

- *Countryside Stewardship* A UK government grant that provides financial incentives for farmers, foresters and land managers to look after and improve the environment. CS protects and enhances the natural environment by: increasing biodiversity. improving habitat. expanding woodland areas.

- *England Woodland Creation Offer* Landowners, land managers and public bodies can apply to the England Woodland Creation Offer (EWCO) for support to create new woodland, including through natural colonisation, on areas as small as one hectare.

- *Plymouth and South Devon Community Forest* A ambitious new project that will see hundreds of new trees planted across the area stretching from Plymouth to Dartmoor and South Devon encompassing 1,900 hectares of land to form a mosaic of different forest habitats. Unlike traditional forests, community forests aren't geographically restricted to one place. Instead, they are a spread out across a mix of community woodland, private woodland, on street, urban woodland, wooded habitat corridors and hedgerows.

- *Life on the Edge* LotE is a multi-partner project, led by the South Devon Area of Outstanding Natural Beauty team, with their main partner, Buglife, along with South West Coast Path Association, National Trust and Torbay Coast and Countryside Trust. With support from National Lottery Heritage Fund, we aim to restore viable populations of some of the UK's rarest insects living along the South Devon coast between Berry Head and Wembury, including the last known colony of the Six-banded nomad bee. This bee faces imminent extinction unless action is taken. The project will also enable the recovery of over 20 other threatened invertebrates including the Long-horned bee, Short-necked oil beetle, and Moon spider.

- *Payments for Ecosystem Services* - The benefits of natural assets to society – such as carbon sequestration, water quality enhancement, pollination or natural flood management – are increasingly being given a financial value, to help account for them in decision-making. Markets for ecosystem services are developing gradually in the UK and are seen as having significant potential to fund nature recovery.

10. Appendices

A: Priority habitat expansion targets - rationale

Priority habitat type	Increase by %	Rationale
Ancient woodland	0	It is not possible to create new ancient woodland in the timescale of this plan. However, in centuries to come, new broadleaved woodland could gain this status.
Coastal vegetated shingle	0	This habitat cannot be created in the lifespan of this plan.
Lowland heathland, lowland meadows	500	The limited surviving areas of lowland heath and lowland meadows in the AONB are the result of centuries of agricultural change. Their restoration is a priority and substantial expansion can reasonably be targeted with current agri-environment support.
Purple moor grass & rush pastures, reedbeds	300	Very little survives of this habitat so an additional boost is needed.
Reedbeds	300	Very little survives of this habitat so an additional boost is needed.
Rivers	0	Not possible to create new rivers in the timespan of this plan.
Traditional orchard, wood pasture and parkland	300	Characteristic of the AONB landscape and much reduced in extent: a priority for expansion.

B: Champion Species

Working collaboratively the National Association for AONBs, the AONB Network and its partners developed the Colchester declaration which sets out clear short, medium and long term ambitions. The declaration demonstrates our network's readiness to act to redress declines in species and habitats within the context of a wider response to climate change. A landscape and ecological network-based approach is proposed rather than a single species-focussed approach. Although it should be recognised that species can be a powerful people engagement tool and can open doors to engagement with a wide range of groups including farmers and landowners. AONB Lead Officers were presented with draft species criteria and Initial suggestions for the South Devon AONB's top 5 species were developed following a set criteria.

Species criteria

In order to create national 'guidelines' for species recovery across the AONB network to enable threatened species to be taken off the national list, we have developed a draft set of criteria to discuss with Natural England. Please comment on the proposed criteria for choice of threatened species (to be filtered nationally and then ground-truthed locally in each AONB):

- *Nationally threatened, rare or scarce (IUCN, section 41) AND*
- *The area [AONB] has a major responsibility for ensuring the species survives and prospers in the British Isles AND*
- *Conservation action is required, and we know what needs doing– including site protection (especially rare or vulnerable features) and active habitat management, actions are achievable/ realistic and are not just monitoring or research AND*
- *There has been a recorded decline since the year 2000*

Subject to the above criteria, where there have been several similar species which occupy the same habitat, to prevent the list becoming too long and unfocussed, so stifling conservation action, preference has been given to those species which are:

- *Charismatic*
- *Indicators of high quality or rare habitats which support many other rare or threatened species.*
- *Not critically dependent on another species already listed.*

Other considerations:

- *Iconic species*
- *Species of economic interest*

The top five species or assemblages identified by the AONB Staff Unit that best fit the criteria are considered to be:

- Seagrass
- Long horned mining bee, Six banded nomad bee, Mediterranean oil beetle
- Greater horseshoe bat and Grey long eared bat
- Cirl bunting
- Strapwort

1.Seagrass meadows.

Seagrass meadows are rare, vegetated littoral and sub-littoral biological habitats that occur within at least two of the estuaries of South Devon AONB, the Yealm and the Salcombe-Kingsbridge estuaries. These meadows include dense stands of the Common eelgrass *Zostera marina* and/or Dwarf eelgrass *Zostera noltei* intertidally. The subtidal meadows support highly important invertebrate and fish assemblages, buffer wave action, and sequester and lock away significant amounts of carbon.

2. Invertebrates.

The South Devon coast is of national importance for its *hymenoptera* (bees and wasps). Three indicative species of the Important Invertebrate Area have been chosen as champion species for the South Devon AONB. These are the Long horned mining bee *Eucera longicornis*, the Six-banded nomad bee *Nomada sexfasciata* and the Mediterrranean oil beetle *Meloe mediterraneus*.

The Six-banded nomad bee is a cuckoo parasite on the Long horned mining bee, a species found on predominately coastal sites along the south coast of the UK where they survive on soft rock cliffs, flower rich grasslands and coastal grazing marsh. Their preferred foodplant species are members of the pea family such as meadow vetchling Lathyrus pratensis, kidney vetch *Anthyllis vulneraria* and bird's-foot trefoil *Lotus corniculatus*. The six banded nomad bee will patrol areas where the long horned mining bee is nesting waiting for an opportune time to enter the host nest and lay an egg in the nest cell of the host bee. Only 6 records are present for long horned mining bee since 2010 within the AONB, with only 2 records present for Six banded nomad bee since 2010, at Prawle Point and Slapton Ley.

Mediterranean oil-beetle is a very rare invertebrate, confined to coastal grasslands along the south coast of the UK, and until recently (within the last 10 years) was thought extinct from the AONB. The female Mediterranean oil- beetle seeks out bare ground to dig nest burrows to then lay her eggs. The larvae, once hatched, ascend nearby flowers and await a bee to attach themselves to using their hooked feet. The unwitting bees transports the larvae back to their nests where the larvae feed on the bees' eggs and pollen nectar stores. Only 2 records of Mediterranean oil-beetle have been recorded since 2010 within the AONB.

3. Bats.

The Greater horseshoe bat *Rhinolophus ferrumequinum* is one of the UK's rarest bat species, typically associated with livestock grazing, as well as being heavily reliant on woodland fringe habitats for foraging. The Greater Horseshoe Bat Project (2016- 2021) identified core areas for the species in the Avon Valley, around Berry Head and towards Dartmouth. The South Hams has the largest known Greater horseshoe maternity roost in the UK and foraging areas and commuting linkways from this roost, as well as summertime and satellite roosts within the AONB, are recognised as important to the long-term favourable conservation status of the Greater horseshoe bat.

The Grey long-eared bat *Plecotus austriacus* is one of the UK's rarest bat species and is one of the conservation target species for the Back from the Brink Project which aims to save 20 of the rarest species within the UK from extinction. Grey long-eared bats have one of the more restricted distributions, with only a few known colonies present in the UK some of which are along the coast of South Devon AONB. Grey long-eared bats are associated with species rich grasslands and meadows, along with woodland fringe habitat, with their diet including moths, crane flies and beetles. 4 records are present for grey long- eared bat since 2010 within South Devon AONB; the difficulty of

distinguishing grey from brown long-eared bats in the field means that records are often sparse and this species is likely under-recorded.

4. Cirl bunting.

South Devon is a stronghold for the Cirl bunting, *Emberiza cirlus* which is associated with a low-intensity mixed farming landscape. They are predominately seed and grain feeders in the winter, foraging over stubble fields, but feed on invertebrates during the summer months within unimproved grasslands. Hedgerows also play a vital role year-round for the species, providing both foraging and nesting habitat in the summer months and providing shelter in the winter months. Cirl bunting are a sedentary species, meaning they do not migrate and will often spend their entire lives within the same couple of square kilometres. It is therefore crucial that all these different but equally important habitats are available within a short distance of each other.

Close to extinction in the UK in the 1990's, the species has since recovered substantially thanks to a long-lasting campaign led by the RSPB to secure suitable farmland habitats. By 2016 50% of the national population was to be found in the South Devon AONB and today the national population exceeds 1000 pairs.

5. Strapwort.

Strapwort *Corrigiola litoralis* is an exceptionally rare plant in the UK with only known naturally occurring UK. Slapton Ley National Nature Reserve and very small populations nearby are its stronghold. It is found in shingly freshwater pool margins where water levels fluctuate.

C: Rewilding and re-introductions

Many successful rewilding and species re-introductions have already been carried out in the UK. The practice of rewilding can be defined as large-scale eco-system restoration to the point where nature is allowed to take care of itself. It seeks to reinstate natural processes and, where appropriate, missing species – allowing them to shape the landscape and the habitats within.

This plan neither supports nor objects to the reintroduction of species in the landscape but will in individual cases consider the many questions that arise for such efforts at different scales.

- Tree species choice for plantations and for landscape character?
- What role should animal species reintroduction play in the delivery of nature recovery goals?
- Should specific objectives/targets be set for species reintroduction?
- How can the potential benefits be maximised from species reintroduction, and ensure the correct species are reintroduced in the correct places?
- What can be done to help prevent unregulated species reintroductions?